

ABSTRACT

5 NOVEL ENDO- β -1,4-GLUCANASES

An enzyme exhibiting endo- β -1,4-glucanase activity which belongs to family 9 of glycosyl hydrolases is obtainable from or endogeneous to a strain belonging to the genus *Bacillus* such as
10 *Bacillus licheniformis*, ATCC 14580; an isolated polynucleotide (DNA) molecule encoding an enzyme or enzyme core (the catalytically active domain of the enzyme) exhibiting endo- β -1,4-glucanase activity selected from (a) polynucleotide molecules comprising a nucleotide sequence as shown in SEQ ID
15 NO:1 from nucleotide 76 to nucleotide 1455 or from nucleotide 76 to nucleotide 1941, (b) polynucleotide molecules that encode a polypeptide being at least 75% identical to the amino acid sequence of SEQ ID NO:2 from amino acid residue 26 to amino acid 485 or from amino acid residue 26 to amino acid residue 646, and
20 (c) degenerate nucleotide sequences of (a) or (b), the expressed endoglucanase enzyme being useful in various industrial applications.